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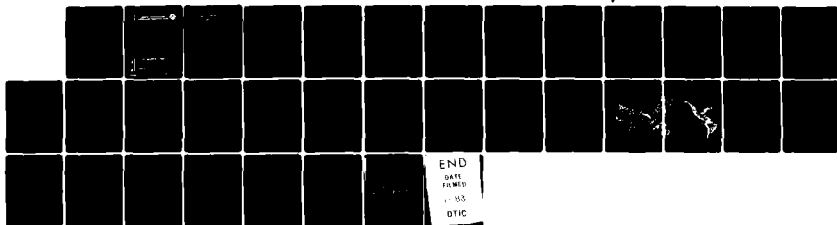
CHARACTERISTICS OF SEAPORTS OF THE FREE WORLD(U) DAVID
W TAYLOR NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER
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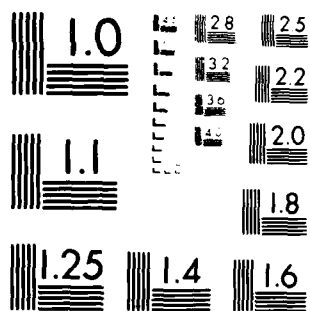
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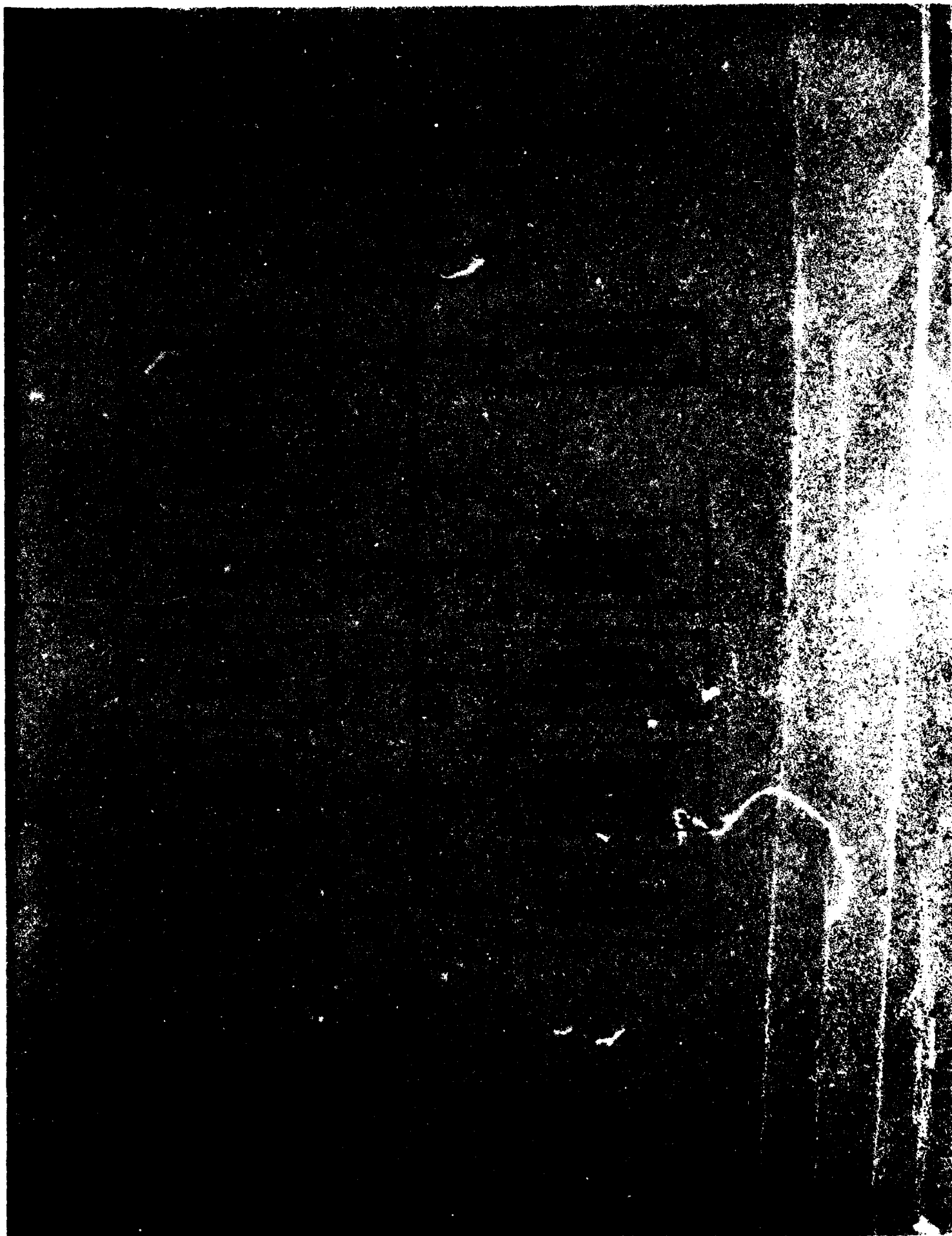
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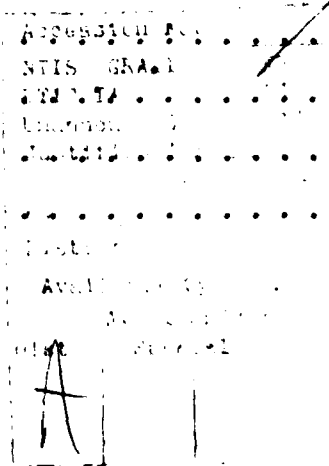


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ABSTRACT

The objective of this study is to design and implement a data base of deep water seaport characteristics of nations within the free world. Both military and civilian ports are considered. The study includes only general, container, roll-on/roll-off cargo; petroleum and petroleum products; ammunition; and dry and liquid bulk cargo. Data sources include both verifiably, reliable documents and port personnel. The Data Management System used to implement the data base is System 2000 which provides for data base querying and for continuous updating.

ADMINISTRATIVE INFORMATION

The seaport characteristics data base was designed primarily to aid naval planning groups who have the responsibility of planning operations. The study was initiated in FY 80 by the Logistics Division (Code 187) of the Computation, Mathematics and Logistics Department. The study was funded by the Logistics Plans Division (Code 40) of the Deputy Chief of Naval Operations (Logistics). The Logistics Division (Code 187) of the Computation, Mathematics and Logistics Department (Code 18) was the performing organization.

1. INTRODUCTION

BACKGROUND

Naval planning groups with responsibility for planning naval operations require information on seaport characteristics such as location, tidal range, storage capacity, and throughput rate for deep water ports. Included in these planning groups are OP 40, CINCLANT, and CINCPAC. The DTNSRDC Logistics Planning Baseline Support System also requires similar seaport information. Because information on these characteristics is sometimes sparse and difficult to obtain, this study was undertaken in FY 80 for selected seaports. The ports were selected on the basis of previous use in maritime operations and on their relevance to scenarios associated with naval operations.

OBJECTIVE

The objective of this study is to design, develop, and implement a data base of verifiable information and data on characteristics of selected ports.

SCOPE

This study includes selected deep water seaports of nations within the free world.

GENERAL INFORMATION

In the initial effort 565 ports were selected. From these selected ports, a set of 90 was given priority for initial processing. This set includes U.S. and foreign ports, both military and civilian. Updating the data base and adding new ports are considered to be continuous efforts.

In this study, the word "terminal" means pier, wharf, or dock. Some ports have numerous terminals; this study includes only those terminals which accommodate general, container, and roll-on/roll-off (Ro-Ro) cargo; petroleum and petroleum products; ammunition; and both dry and liquid bulk cargo.

Most terminals require material handling equipment (MHE) for off-loading, loading, or processing cargo. Appendix A lists the several types of equipment considered in this study. Equipment may be designated for use at a particular

terminal, or it may be shared by two or more terminals. Stevedore equipment is usually available to any terminal upon request.

The selection of seaport characteristics to be addressed by this study was a joint effort by the authors and the potential users. At least 30 basic characteristics were selected. A questionnaire was developed to aid in acquiring data on these 30 characteristics.

2. DATA ACQUISITION AND SOURCE

DATA QUESTIONNAIRE

The data questionnaire, reproduced in Appendix B, requests the following 30 items of information:

Port Name	Name of port
Geographical Location (Geoloc) Code	A unique set of four alphanumeric characters assigned to a given port
Latitude	Port latitude
Longitude	Port longitude
Country/state code	An alphabetic or numeric set of characters. The alphabetic characters identify the foreign country in which the port is located. The numeric characters identify the state within the U.S. in which the port is located (see Appendix C)
Section (LPR* Code)	A set of alphanumeric characters which identifies the section of the geographical area in which the port is located (see Appendix D)
Theater	Area of operation. The various areas are defined and coded (see Appendix E)
Port Authority	The governing body of the port
Anchorage** (number, class)	The number of anchorage areas assigned to the port. Anchorages classes are defined as follows: Class I (minimum dimensions) 800-yd diameter; 38-ft depth Class II (minimum dimensions) 500-yd diameter; 30-ft depth

*LPR - Logistic Planning Report

**Anchorages may be shared with other ports.

Class III (minimum dimensions)
300-yd diameter; 20-ft depth

Tidal Range

The mean (in ft) of the rise and fall of the surface of the water within the port

Port Controller

Specifies whether the port is under civilian or military control

Storage

Covered - that space (sq ft) which protects cargo from weather elements
Open - that area (acres) which does not offer protection from the weather elements
Refrigerated - that space (cu ft) with low temperature to preserve perishable cargo
Ammunition - that space (cu ft) in which explosives can be maintained safely
Bulk POL - that space (barrels) which houses petroleum and petroleum products

Port Container or Ro-Ro Facilities

Facilities which can be used for handling container or RoRo cargo, e.g., berth, crane, ground storage, rail track, platform, shed, warehouse

Ship Repair Facilities

Major repairs refer to those repairs which require shipyard or dry dock services. All others are considered general or minor repair. When a port has no facilities for repair, that fact is indicated

Bunker Service

Services which provide fuel for ship consumption

Working Hours

The specific days worked including start and stop times

Traffic

The amount of in/out cargo (short tons) processed by the port within a given year

Towage

Tugs or equivalent ships to aid the movement of cargo vessels

Port Clearance

Identifies the types of vessels authorized to enter port

Throughput Rate

The amount of cargo that can be completely processed within a given time

Pier/Wharf/Dock

Name of terminal

Berths

Number of berths at terminal

Beam

Width of minimum berth at terminal

Length of shortest berth

Length of shortest berth at terminal

Class

Berth Class is defined as follows:

Class of General Berth	Size Vessel Accommodated	
	Length (ft)	Draft (ft)
A	500	30
B	460	28-24
C	350	21-17
D	250	16
F	100	11-6

Class of Tanker

Berth		
T-A	600	33
T-B	525	30
T-C	450	25
T-D	250	13
T-E	175	8

Terminal Type

Defined by the vessels and cargo accommodated

Terminal Capacity
(av. throughput per day)

The average amount (short tons/barrels) of cargo that can be processed in a normal working day

- civilian
- military
 - peacetime
 - wartime

Controlling Depth (draft)

The minimum depth (in ft at mean low water) alongside the terminal

Vessel Type Served

The type of vessel accommodated by the terminal

Cargo Types

The types of cargo processed by the terminal

Material Handling Equipment

Equipment used for transferring and processing cargo at the terminal

DATA SOURCE

Data were obtained from both documents and port personnel. The documents researched are listed in Appendix F. The most informative documents were "Ports of the World" and "Corps of Engineers U.S. Army Port Series". When desired information was not found among documents for U.S. ports, a questionnaire was mailed to port personnel for additional data.

3. DATA PROCESSING

ORGANIZATION

The data were segregated into three groups: port data, terminal data, and material handling equipment (MHE) data. A port may have several terminals and a terminal may use several types of MHE. For this study, data grouping provides an added advantage for computer input and handling.

The port group contains those characteristics which are common, or nearly common, to all ports and are independent of the number of terminals a port may have. This group includes name, geoloc code, location, port authority, tidal range, and storage accommodations. The terminal group contains those characteristics which are pertinent and common or nearly common to all terminals and are independent of the port to which they belong. Examples are berth information, controlling depth, and throughput. The material handling equipment group contains those characteristics which are pertinent to equipment and independent of where it is used. Examples are type, quantity, and capacity.

ACCOUNTABILITY

A port may have many terminals, and a terminal may have many types and quantities of MHE. To determine the terminal to which a type of equipment is assigned and the port to which the terminal belongs, the following system was used: each port has a unique geoloc code which is used for the port's identification (ID) code, i.e., Port ID = Port Geoloc Code. Each terminal of a given port is assigned a unique three-digit number. A terminal identification code is its assigned three-digit number annexed to the right side of its port ID, e.g., terminal assigned

number is 025, port ID is AACD, terminal ID is AACD025. Each type of equipment is assigned a unique two-digit number. The same type of equipment may be used at many terminals. To identify the types used at a given terminal, the MHE ID code is its unique two-digit number annexed to the right side of its terminal code, e.g., MHE unique two-digit number is 10, terminal code is AACD025, MHE code is AACD02510.

4. DATA BASES

DATA MANAGEMENT SYSTEM

The system selected to manage the port data base is System 2000 (2K). This system was selected because it satisfies the basic requirements (batch, interactive, and report writing capabilities; COBOL interface) and is cost effective and convenient. In addition, the system is hierarchically structured, providing an ideal tool for handling port data. System 2000 also manages a reference data base for the study. The reference data base provides the sources from which the data were taken. As data were obtained, the source name and page number, when appropriate, were recorded to develop an auxiliary data base of source information from which a data item can be traced to its origin.

QUERYING

System 2000 provides for querying the data bases for desired entities. A user may choose to query for a single type or a combination of types of elements. Querying may be limited to a particular area or unlimited to cover all possible areas. Sample output is presented in Appendix G. Minimal training is required to enable users to handle all facets of querying.

UPDATING

The data bases are never final. Continuous change in sea port communities makes updating the present data bases a necessity. To maintain compatibility between the data bases, they must be simultaneously updated by either the interactive or batch method.

5. SUMMARY

The purpose of this effort is to provide, in a single document, a verifiable base of seaport characteristics for selected deep water ports in the free world. The study includes general, container, roll-on/roll-off cargo; petroleum products; ammunition; and dry and liquid bulk cargo. Data have been obtained from verifiable reliable documents and from port personnel. The source name and page number where applicable were recorded for each data item contacted. From these sources, an auxiliary data base was developed which provides the referenced source for each data item.

Data for the port data base are segregated into three groups: port data, terminal data, and material handling equipment. Data grouping provides an added advantage for computer input and handling. The System 2000 (2K) data base management system was selected to manage the data bases because it satisfies the basic requirements and is cost-effective and convenient.

6. EXPLANATION OF APPENDIXES

Appendixes A through G contain amplifying information. Appendix A is a list of material handling equipment used at terminals for loading/off-loading and transferring cargo.

Appendix B is a sample of the data acquisition questionnaire which was used as a guide for collecting pertinent data for the study. Basic seaport characteristics are listed in Appendix B.

Appendix C contains a list of countries and their assigned country codes. Each country, with the exception of the United States, is assigned a unique two-character alphabetic code which is used in the port data base to identify the country to which the port is assigned. Each state within the United States is assigned a unique two-digit code.

Appendix D is a map of the world divided into geoloc code areas. Each division containing seaports of interest is assigned a unique code which identifies the area in which a seaport is located.

Appendix E is a list of the theater (area of operation) codes and their descriptions. The codes are the set of whole numbers, one through fourteen, and each description identifies the countries or areas to which the number is assigned.

Appendix F is a list of data sources which includes names of documents and computer files. Port personnel were also used as a source.

Appendix G contains two sets of sample computer output. Sample one, given a selected set of geoloc codes for input, is a printout of desired characteristics which includes the corresponding port name and geoloc code, location attributes (longitude, latitude, country code, LPR code, theater code), tidal range in feet, repair and bunker codes, traffic year, and the amount of traffic (cargo) in short tons processed within the traffic year. Sample two is an illustrative set of characteristics for one seaport (Sunny Point). This set contains port name, location attributes, and port type (type(s) of cargo the port can accommodate). Sample three illustrates the use of theater code as an input parameter. This illustration uses theater code 14 (see appendix E). The set of desired characteristics includes port name, geoloc code, country code, LPR code, and port authority. The data set contains other characteristics for the terminals and their material handling equipment.

APPENDIX A

MATERIAL HANDLING EQUIPMENT

(Includes other names by which they are known)

1. Bridge container crane
2. Bridge crane
3. Container crane
 - Portainer crane
 - Traveling container crane
4. Crawler crane
 - Caterpillar crane
5. Floating crane
6. Gantry crane
 - Gantry hoist
7. Hydraulic crane
8. Lift crane
9. Locomotive crane
 - Rail crane
10. Mobile crane
 - Portable crane
 - Truck crane
 - Wagon crane
 - Mobile hoist
11. Pedestal crane
 - Revolving crane
 - Rotating crane
12. Floating derrick
13. Hose handling derrick/crane
14. Mast and boom derrick
15. Sheer leg derrick
16. Stiff leg derrick
17. Bale clamp lift
18. Container lift truck
19. Fork lift
 - Fork lift truck

- 20. Lift truck
- 21. Pallet lift
- 22. Paper roll clamp lift
- 23. Top lift truck
- 24. Barge unloader
- 25. Boom
 - Cargo mast
- 26. Bridge tower
- 27. Coal unloader tower
- 28. Container handler
- 29. Container transporter
- 30. Conveyor system
- 31. Elevator
- 32. Front-end loader
- 33. Grain hopper
- 34. Hose handling tower
- 35. Loading/unloading arm
- 36. Lumber straddle carrier
 - Straddle type container transporter
- 37. Marine legs
- 38. Mobile stacker
- 39. Ore unloader
- 40. Shovel truck
- 41. Tractor
- 42. Traveling coal loader
- 43. Traveling loading tower
- 44. Vacuum pump
- 45. Winch
- 46. Straight line crane
- 47. "A" frame derrick
- 48. Pipeline
- 49. Hose
- 50. Vacuum clamp truck
- 51. Coal loading tower
- 52. Trailer

APPENDIX B

DATA QUESTIONNAIRE

Port Name:

Geoloc Code:

Location

Latitude:

Longitude:

Country/State (Code):

LPR Code:

Theater:

Port Authority:

Anchorage (Number, Class):

Tidal Range:

Port Controller:

Storage

Covered storage space (sq ft):

Open storage space (acres):

Refrigerated storage space (cu ft):

Ammunition storage space (cu ft):

Bulk POL storage space (barrels):

Total Port Container facilities (0,1,2,3,4,5,6,7)*:

Total Port RO/RO facilities (0,1,2,3,4,5,6,7)*:

Ship repair facilities (Major, Minor, None):

Bunkers (Available/not available):

Working Hours:

Traffic (tons cargo in/out per given year):

Towage (Available/not available):

Port Clearance

General cargo:

Bulk POL:

Ammunition:

Nuclear power:

Throughput Rate (Average for port in a normal working day (daily rate)):

Pier/Wharf/Dock Name:

Berths (number civilian, number military)

Width of minimum berth (Beam):

Length of shortest berth:

Class:

-
- *0 - None
 - 1 - berth
 - 2 - crane
 - 3 - ground storage
 - 4 - rail truck
 - 5 - RoRo platform
 - 6 - shed
 - 7 - warehouse

Terminal

Type*:

Capacity (Average daily throughput)

- . Civilian:
- . Military
 - Peacetime:
 - Wartime:

Controlling depth (Draft):

Vessel Type Served**:

Cargo Type***:

Terminal Controller:

Material Handling Equipment

(Number, type,**** capacity, restrictions):

-
- *1 - All cargo
 - 2 - Container
 - 3 - POL
 - 4 - General cargo
 - 5 - Ammunition
 - 6 - Ro/Ro cargo
 - 7 - Military
 - 8 - Dry bulk
 - 9 - Liquid bulk

- **1 - Tanker
- 2 - Container
- 3 - General cargo
- 4 - OBO (Ore, Bulk, Oil)
- 5 - LASH or SEABEE
- 6 - Ro/Ro
- 7 - Passenger
- 8 - Dry bulk
- 9 - Liquified gas/propane
- 10 - Refrigerated
- 11 - Barges
- 12 - Other (specify)

- ***1 - General cargo
- 2 - Passenger
- 3 - POL
- 4 - Grain
- 5 - Refrigerated
- 6 - Natural resources
- 7 - Other (specify)

**** - (See Appendix A)

APPENDIX C

COUNTRY/STATE CODES

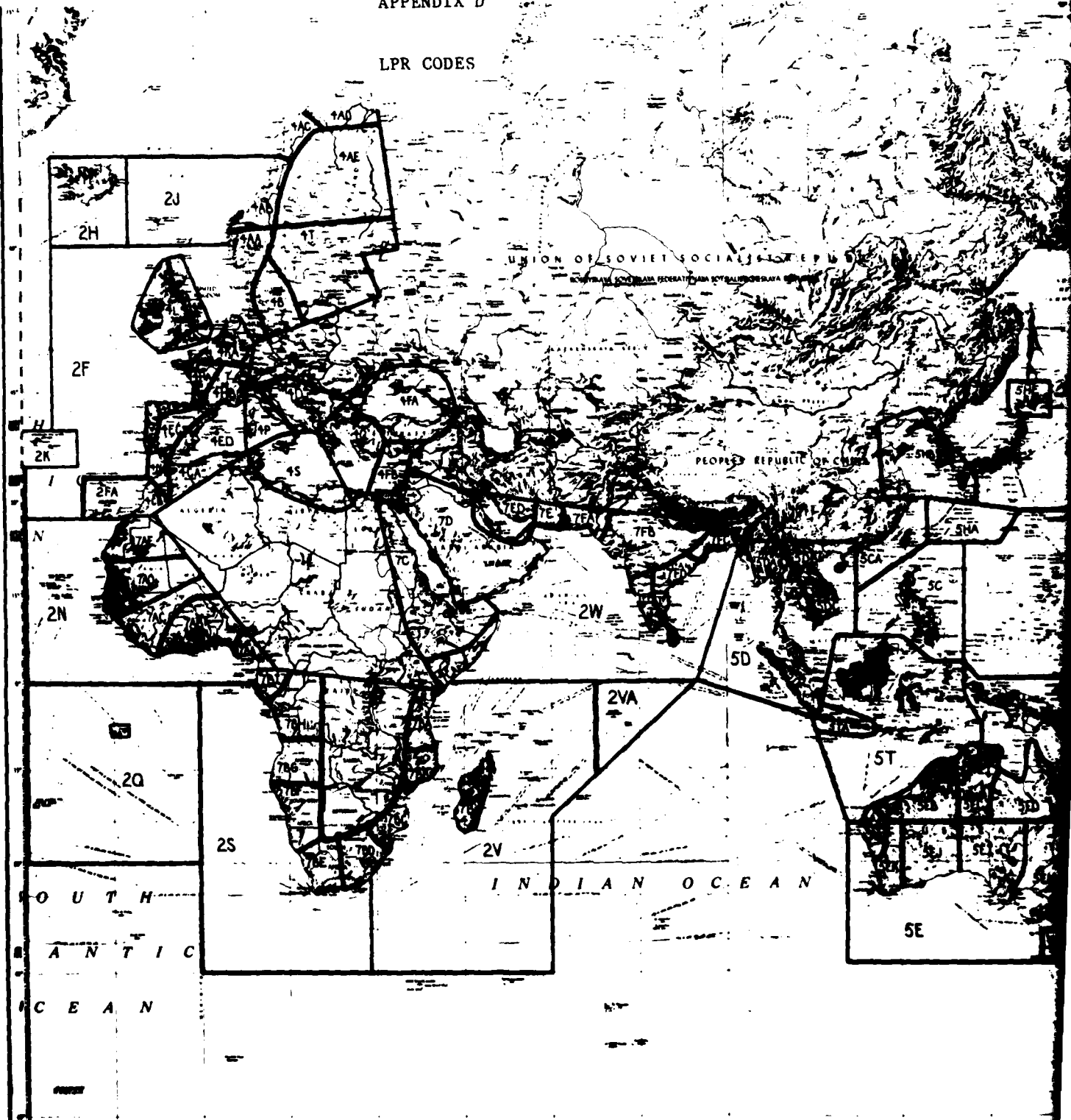
<u>COUNTRY CODE</u>	<u>COUNTRY</u>	<u>COUNTRY CODE</u>	<u>COUNTRY</u>
AG	Algiers	GT	Gutemala
AO	Angola	GY	Guyana
AQ	Samoa	HA	Haiti
AR	Argentina	IC	Iceland
AS	Australia	ID	Indonesia
BA	Bahrain	IN	India
BD	Bermuda	IR	Iran
BE	Belgium	IS	Israel
BF	Bahamas	IT	Italy
BG	Bangladesh	IV	Ivory Coast
BM	Burma	IZ	Iraq
BP	Solomon	JA	Japan
BR	Brazil	JM	Jamaica
BX	Bruni	KE	Kenya
CA	Canada	KS	South Korea
CB	Cambodia	KU	Kuwait
CE	Sri Lanka (Ceylon)	LE	Lebanon
CF	Congo	LY	Lybia
CG	Zaire	MA	Madagascar
CH	China	MO	Morocco
CI	Chile	MP	Martinique
CM	Cameroon	MR	Mauritania
CO	Columbia	MT	Malta
CS	Costa Rica	MU	Oman
CU	Cuba	MX	Mexico
CY	Cyprus	MY	Malaysia
DA	Denmark	MZ	Mozambique
DO	Domca	NA	Netherlands Antilles
DR	Dominican Republic	NC	Nouvelle Caledonie
EC	Ecuador	NI	Nigeria
EG	Egypt	NL	Netherlands
EI	Ireland	NO	Norway
ET	Ethiopia	NQ	Trust Territory of the Pacific Islands
FI	Finland	NZ	New Zealand
FJ	Fiji	PE	Peru
FR	France	PL	Poland
GA	Gambia	PN	Panama
GB	Gabon	PO	Portugal
GE	Germany	PP	Papua
GH	Ghana	PQ	Panama Canal Zone
GI	Gibraltar	RO	Romania
GL	Greenland	RP	Phillipines
GP	Guadeloup	RQ	Puerto Rico
GQ	Gaum	SA	Saudi
GR	Greece		

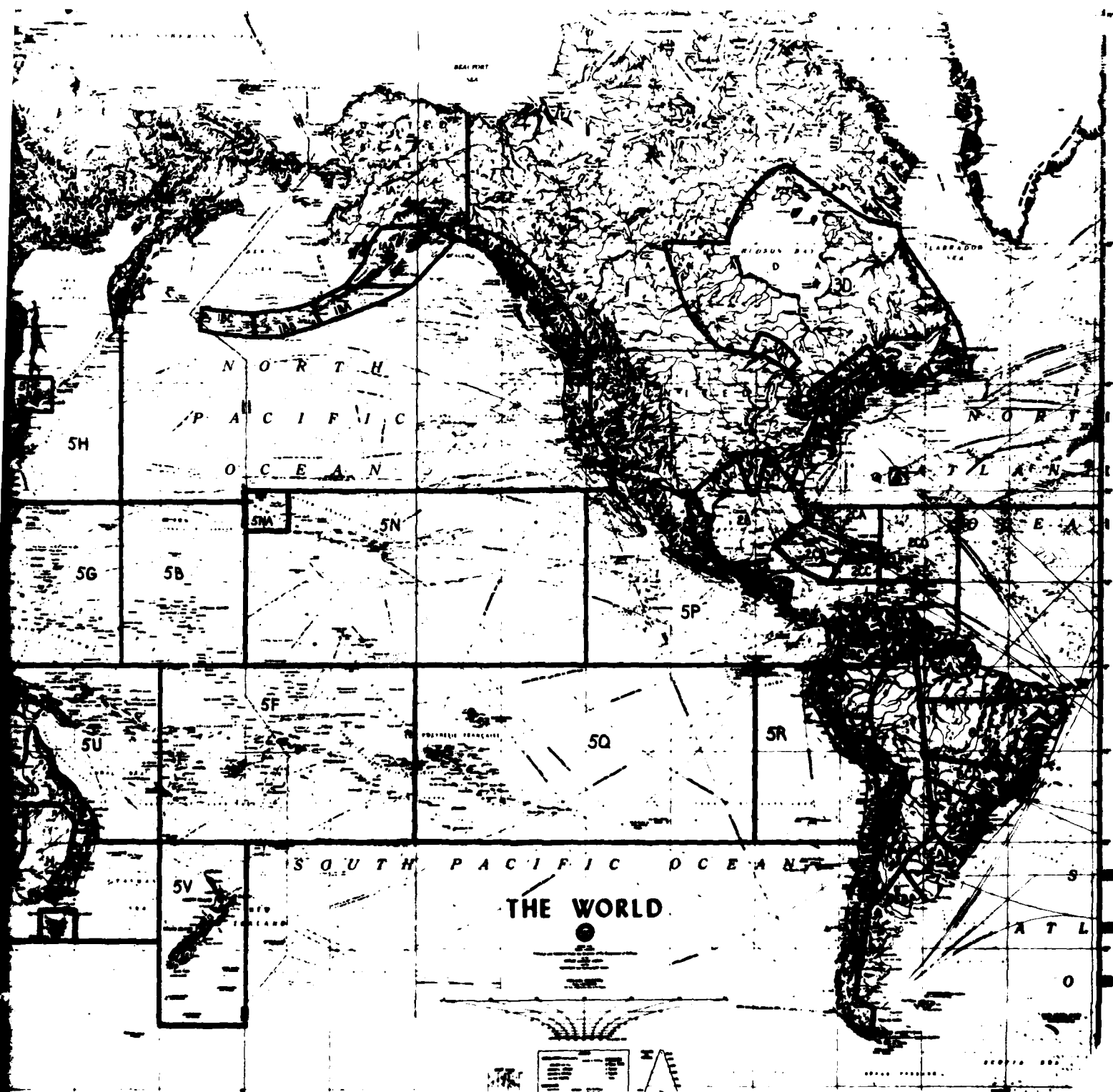
<u>COUNTRY CODE</u>	<u>COUNTRY</u>
SF	South Africa
SG	Senegal
SH	St. Helena
SL	Sierra
SN	Singapore
SO	Somalia
SP	Spain
SU	Sudan
SW	Sweden
TD	Trinidad
TH	Thailand
TO	Togo
TS	Tunsa
TU	Turkey
TW	Taiwan
TZ	Tanzania
UK	United Kingdom
UR	Soviet
UY	Uruguay
VE	Venezuela
VQ	Virgin Islands
WI	West Sahara
YE	Yemen
YO	Yugoslavia
ZA	Zambia

<u>STATE CODE</u>	<u>STATE</u>
01	Alabama
02	Alaska
04	Arizona
05	Arkansas
06	California
08	Colorado
09	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	Iowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana
31	Nebraska
32	Nevada
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming

APPENDIX D

LPR CODES





2

APPENDIX E

THEATER CODES

<u>No.</u>	<u>Description</u>
1.	North America: East Coast, Gulf of Mexico, Great Lakes, Saint Lawrence River; Newfoundland; Nova Scotia; Bermuda Islands
2.	North America: West Coast, Hawaii, Midway Islands, Alaska; West Canada
3.	Central America also Cuba, Virgin Islands, Puerto Rico
4.	South America
5.	Australia, New Zealand, Phoenix Islands
6.	Japan, Korea, China, Wake Island, Guam
7.	Philippines, Mariana Islands, Vietnam, Cambodia, Thailand, Malaysia, Indonesia
8.	India, Bangladesh, Pakistan, Chagos Archipelago, Sri Lanka (Ceylon)
9.	Persian Gulf
10.	Red Sea and Gulf of Aden
11.	Somalia, Kenya, Tanzania, Mozambique, South Africa
12.	Senegal, Sierra Leone, Liberia, Nigeria, Ghana, Cameroon, Zaire, Angola, Ascension, Saint Helene
13.	Mediterranean Sea also Morocco, Canary Islands
14.	Azores, Portugal, France - West Coast, Germany, United Kingdom, Netherlands, Belgium, Northern Spain, Denmark, Norway, Sweden, Finland, Iceland

APPENDIX F

DATA SOURCES

Documents from which data were obtained:

- . Ports of the World, 1978, 1979
- . Corps of Engineers, U.S. Army Port Series, 1971-1980
- . Guide to Port Entry, 1979-1980
- . Joint Chiefs of Staff (JCS), SMRP*-84 Report, April 1980
- . CONUS Ammunition Port, MTMC** Report TE 7T-19, August 1978

Computer files providing data:

- . Maritime Administration Port File, June 1980
- . Joint Operations Planning System (JOPS) Port File, April 1980

Some data were obtained from port personnel.

*SMRP - Strategic Mobility Requirements Programs

**MTMC - Military Traffic Management Command

APPENDIX G
SAMPLE COMPUTER OUTPUT

SAMPLE 1

PORT NAME	GFO CODE	LONGITUDE	LATITUDE	COUNTRY CODE	LPR CODE	THEATER CODE	TIDAL RANGE	REPAIR CODE	RUNKER CODE	TPAF YEAR	TRAFFIC TO AMOUNT
AARMUS	AADT	181300E	560900N	0A	4B	14		1	1	1976	1763000
ANCHORAGE	AJRR	149530W	611400N	02	1AA	2	251.0	2	1	1975	2587114
BALTIMORE	AVBU	763500W	391700N	24	3J	1	11.0	1	1	1976	32639043
BOSTON	CAMP	710300W	422200N	25	3G	1	96.0	1	1	1976	24719452
CORPUS CHRISTI	ENCM	972300W	274800N	48	3P	1	10.0	1	2	1976	64293793
HONOLULU	K7Y7	1575215W	211830N	15	5M	2	20.0	1	1	1976	90800000
HOUSTON	LCHT	951700W	294500N	48	3P	1	12.0	1	1	1976	41784976
LONG BEACH	NPTU	1181262W	334515N	06	3R	2	37.0	1	1	1980	
MOBILE	QMF7	88025W	301348N	01	3M	1	15.0	1	1	1980	260000
NAVAL STATION	ARJC	176300W	515200N	02	1BB	2	40.0	2	1	1980	
ADAK											
NEW ORLEANS	RQMK	900200W	293800N	22	3N	1	0.0	1	1	1975	117000000
NEW YORK	RRHU	735800W	404010N	36	3H	1	47.0	1	1	1976	5887000
OSLO	SNKK	104500E	595500N	NO	4AA	14	10.0	1	1	1980	370000
PEARL HARBOR	SVZJ	156000W	212200N	15	5M	2	6.0	1	1	1975	19300000
PUSAN (RUSAN)	TVJD	1290400E	350600N	KS	5MB	6	28.0	1	1	1977	2791794
SOUTHAMPTON	VXYW	12480W	505400N	UK	4GA	14	59.8	1	1	1979	31537A
SUNNY POINT	WNPT	775600W	335900N	37	3L	1	5.0	0	2		
YOKOHAMA	ZNMC	1394000E	352700N	JA	5MD	6	59.0	1	1		

SAMPLE 2

PORT	LONGITUDE	LATITUDE	COUNTRY CODE	PORT TYPE
SUNNY POINT	7756.0W	335900N	37	3

TERM NAME NORTH WHARF
 TERM CONTROLLER 2
 BERTHS 2
 PEACETIME CAPACITY 10200
 WARTIME CAPACITY 14000
 CONTROLLING DRAFT 40.0
 TERM TYPE

5
 VESSEL TYPE

..2
 3
 5
 11
 CARGO TYPE

EQUIPMENT ID	PIECES	CAPACITY	MOBILITY RESTRICTIONS	OWN SHARE
WMPTUG101	2	20.0	M	1
WMPTUG103	2		M	1

SAMPLE 2 (Continued)

PORT SUNNY POINT
 TERM NAME CENTER WHARF
 TERM CONTROLLER 2
 BERTHS 2
 PEACETIME CAPACITY 10200
 WARTIME CAPACITY 14000
 CONTROLLING DRAFT 40.0
 TERM TYPE

5
 VESSEL TYPE

2
 3
 5
 11
 CARGO TYPE

EQUIPMENT ID	PIECES	CAPACITY	MOBILITY RESTRICTIONS	OWN SHARE
WMPT00201	2	200.0	M	1
WMPT00203	2		M	1

SAMPLE 2 (Continued)

PORT SUNNY POINT
 TERM NAME SOUTH WHARF
 TERM CONTROLLER 2
 BERTHS 2
 PEACETIME CAPACITY 10200
 WARTIME CAPACITY 14000
 CONTROLLING DRAFT 40.0
 TERM TYPE

5
 VESSEL TYPE

2
 3
 5
 11
 CARGO TYPE

7
 EQUIPMENT ID PIECES CAPACITY MOBILITY RESTRICTIONS OWN SHARE
 WMPT00301 2 200.0 M 1

SAMPLE 3

PORT	GEO CODE	COUNTRY CODE	LPR CODE	PORT AUTHORITY
ALESUND	AAU	NO	4AR	PORT OF ALESUND AUTHORITY
AREHUS	AAU	NO	4AR	AREHUS HARBOR BOARD
ARENEEN	AAU	UK	4GF	ARENEEN HARBOR BOARD
AMSTERDAM	AAU	NL	4KA	AMSTERDAM HARBOR BOARD
ANTWERP	AAU	BE	4KA	AMSTERDAM HARBOR BOARD
BOENEUX	AAU	BE	4KA	AMSTERDAM HARBOR BOARD
BREVEN	AAU	BE	4KA	AMSTERDAM HARBOR BOARD
BRISTOL	AAU	UK	4KA	BRISTOL HARBOR BOARD
BRUGES	AAU	BE	4KA	BRUGES HARBOR BOARD
CALAIS	AAU	FR	4KA	BRUGES HARBOR BOARD
CUPACAO	AAU	FR	4KA	BRUGES HARBOR BOARD
EL FERROL	AAU	ES	4KA	BRUGES HARBOR BOARD
GHENT	AAU	BE	4KA	BRUGES HARBOR BOARD
HORTA	AAU	PT	4KA	BRUGES HARBOR BOARD
HALF JORDHUF	AAU	PT	4KA	BRUGES HARBOR BOARD
LISBON	AAU	PT	4KA	BRUGES HARBOR BOARD
LIVERPOOL	AAU	UK	4KA	BRUGES HARBOR BOARD
GRANJESTAD	AAU	NO	4KA	BRUGES HARBOR BOARD
OSLO	AAU	NO	4KA	BRUGES HARBOR BOARD
OSTEN	AAU	NO	4KA	BRUGES HARBOR BOARD
PLYMOUTH	AAU	UK	4KA	BRUGES HARBOR BOARD
PRATA DELGACA	AAU	PT	4KA	BRUGES HARBOR BOARD
PRATA AZOFES	AAU	PT	4KA	BRUGES HARBOR BOARD
REYKJAVIK	AAU	IS	4KA	BRUGES HARBOR BOARD
ROTTERDAM	AAU	NL	4KA	BRUGES HARBOR BOARD
SOUTHAMPTON	AAU	UK	4KA	BRUGES HARBOR BOARD
STAVANGER	AAU	NO	4KA	BRUGES HARBOR BOARD
TRONDHIM	AAU	NO	4KA	BRUGES HARBOR BOARD
ZEBRUGGE	AAU	BE	4KA	BRUGES HARBOR BOARD

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